

**DOCKET**

**09-AFC-3**

DATE \_\_\_\_\_

RECD. MAR 18 2010

**Industrial Plumes Effects on Aviation**

Dear Mr. Hoffman,

I have been an advocate for airport safety for the past ten years. During that time I have researched the above issue, and have discovered that it has never been adequately addressed by the FAA; although there are considerable studies by others that show industrial exhaust plumes are hazardous to aviation, both domestic and foreign.

In opposition to a power plant siting adjacent to The Waterbury-Oxford Airport (OXC) here in Connecticut, and how such exhaust plumes would adversely effect airports throughout the country, I have had much dialogue with the FAA during these years, and repeatedly requested the FAA conduct a scientific, comprehensive study of these plumes effects on aviation safety and airport utility.

On Feb. 23rd, 2010, I visited with the FAA at its Headquarters in Washington, D.C., in a meeting requested by me through my Congressman Chris Murphy, and Senator Chris Dodd.

At the start of the meeting, Mr. Melvin Banks distributed a document titled "AOSC Exhaust Plumes Initiative", dated Feb. 23, 2010, which announces that indeed such a study has been embarked upon by the FAA. The reason given by Mr. Banks for the Initiative was "because of the increased concerns for air safety due to the effects of industrial exhaust plumes, both here in the US and world-wide".

Following the handout and discussion, I gave a PP Point presentation on this subject. I have herein attached the FAA document and the presentation for your review. You will note in the presentation that I once again made a plea that such a study be commissioned by the FAA (because I had no prior knowledge of the FAA Initiative)

It is my firm position that no industrial facility having major air emissions be sited in the vicinity of a public use airport. The multiple adverse effects of these plumes on aviation safety and airport utility must be given primacy over other uses of the airspace, to assure the highest possible level of flight safety, and the unimpeded use and efficiency of these airports.

I therefore recommend that the proposed Mariposa power plant application, sited very near the Byron Airport, CA, be denied for the above reasons. This same recommendation would apply to any other construction having major exhaust plumes that would adversely affect air safety and/or airport utility.

The following were present at the meeting:

- \* Melvin Banks, Regions and Center Operations, Manager, Operational Integration, ARC-4, FAA, tel. 202-493-5060
- \* Brian Langdon, Manager, Government & Industry Affairs, FAA, tel. 202-267-3277
- \* Jesse Young, Legislative Assistant, Congressman Chris Murphy, CT 5<sup>th</sup> Dist., tel. 202-225-4476
- \* Ryan Kehmna, Legislative Correspondent, US Senator Chris Dodd, D-CT, tel. 202-224-2823
- \* Stephen Savarese, Esq., Town Attorney, Town of Middlebury, CT, tel. 203-426-8177
- \* Raymond Pietrorazio, Airport Representative, OXC, Middlebury, CT, tel. 203-758-2413 cell 203-223-3090

Should you have any questions, or seek other information on this subject, please do not hesitate to contact me.

Sincerely,

Raymond Pietrorazio

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Middlebury, CT 06762

Raymond Pietrorazio" <ray@ctcombustion.com>

# **AOSC Exhaust Plumes Initiative**

**From:** AOSC

**To:** Mr. Pietrorazio

**Date:** February 23, 2010



Federal Aviation  
Administration

## Background

- September 2008 – Aviation Safety (AVS-1) asked to have this issue assigned to the Airport Obstruction Standards Committee (AOSC) to be evaluated.
- Initiated action to have a thorough evaluation of the science around exhaust plumes as it relates to aviation safety with a performance time of up to 18-months
- Incremental data to be provided as research is conducted over performance period
- Expect results from evaluation to be completed by Fall 2010 and submitted to the AOSC for review.



## AOSC Specific Tasks Requested

MERGING  
PLUMES

1. Determine the impact of plume induced turbulence in different atmospheric conditions and winds.
2. Identify and review analysis of plume issues (e.g. EPA, OSHA,...)
3. Examine the potential impact to both aircraft and aircrew of repeated exposure of flying through plume effluent.
  - Evaluate the chemical content of a smoke plume effluents allowed by the EPA and OSHA regulation
  - Evaluate the aircrew risk level consistent with the EPA and OSHA norms for allowed repeated exposures to chemical contaminants.
  - Evaluate the potential effect on an airframe and engine performance consistent with aircraft manufacture's specifications.
4. Examine the obscuration effect of plume-induced clouds.
  - Ash and soot particles in exhaust plumes may act as obscuration or may induce condensation.
5. Draft a report of the impact of vertical plumes and exhaust effluent on aviation safety.



## Possible Next Steps

- AOSC conduct an initial review of findings provided and suggest next steps.
- AOSC to coordinate finding with appropriate FAA Organizations and stakeholders as appropriate.
- AOSC to assess if additional studies are necessary
- Mitigations (if appropriate) will be determined by the results of the study

